What is claimed is:

1.   A method for efficient processing of a document encoded in a markup language, the

method comprising the step of:

5   communicating an array-based data model representing the document to an

application process through a bus of a printed circuit board.

2.   The method of claim 1, wherein said data model represents a document encoded in

mXML.

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3.   The method of claim 1, wherein said data model represents a document encoded in

XML.

4.   A method for efficient processing of a document encoded in a markup language, the

15   method comprising the steps of:

receiving a document intended for delivery to a target;

processing the document using a special purpose processor; and

passing the processed document to the target for further processing by a general

purpose processor.

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5.   The method of claim 4, wherein said processing step comprises parsing the document.

6.   The method of claim 4, wherein said processing step comprises performing a

transformation on the document.

7.   The method of claim 4, wherein said processing step comprises creating an array-

5   based model of the document.

8.   The method of claim 4, wherein said processing step comprises creating a tree-based

model of the document.

10   9.   The method of claim 4, wherein said special purpose processor comprises an

integrated circuit configured for parsing the document.

10.   The method of claim 4, wherein said special purpose processor comprises a

supplemental general purpose processor for executing computer readable code for parsing the

15   document, said supplemental general purpose processor being distinct from a primary general

purpose processor.

11.   The method of claim 4, wherein said passing step comprises communicating the

document, as processed, to an application process through a bus of a printed circuit board.

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12.   The method of claim 4, wherein said passing step comprises communicating the

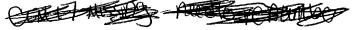document, as processed, to a target via a communications network

13.   The method of claim 12, wherein the target is a local application process.

14.   The method of claim 13, wherein the target is a remote device.

5   15.   A system for efficient processing of a document encoded in a markup language, the

system comprising:

a memory;

a general purpose processor operatively connected to said memory for executing

computer readable code stored in said memory; and

10   a special purpose processor operatively connected to said memory for processing

documents encoded in the markup language;

wherein said special purpose processor is a dedicated processor.

16.   The system of claim 15, wherein said special purpose processor is configured for

15   parsing documents encoded in machine-oriented extensible markup language (mXML).

~~17. The system of claim 16, further comprising:~~

17.   The system of claim 15, wherein said special purpose processor is configured for

transforming documents encoded in machine-oriented extensible markup language (mXML).

20   18.   The system of claim 15, wherein said special purpose processor comprises an

integrated circuit configured for processing the document.

19.   The system of claim 18, further comprising:

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a telecommunications device operatively connected to said general purpose processor

and capable of communicating via a communications network; and

a first program stored in said memory and executable by said general purpose

processor for controlling said special purpose processor to process the document, and for

5   communicating the document, as processed, to a target.

21.   The system of claim 20, further comprising:

a second program stored in the memory and executable by said general purpose

processor for recognizing the document as encoded in the markup language and responsively

10   controlling said special purpose processor to process the document.

22.   The system of claim 15, wherein said special purpose processor comprises a

supplemental general purpose processor for executing computer readable code for processing

the document.

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23.   The system of claim 22, wherein said computer readable code is configured for

processing the document in machine-oriented extensible markup language (mXML).

24.   The system of claim 22, further comprising:

20   a telecommunications device operatively connected to said general purpose processor

and capable of communicating via a communications network; and

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a first program stored in said memory and executable by said general purpose

processor for controlling said special purpose processor to process the document, and for

communicating the document, as processed, to a target.

5   25.   The system of claim 24, further comprising:

       a second program stored in the memory and executable by said general purpose

processor for recognizing the document as encoded in the markup language and responsively

controlling said special purpose processor to process the document.

       26.   A printed circuit board comprising:

       a general purpose processor for executing computer readable code stored in a

memory; and

       a special purpose processor operably connected to said general purpose processor for

communicating therewith, said special purpose processor being configured for processing

15   documents encoded in a markup language.

       27.   The printed circuit board of claim 26, wherein said special purpose processor

comprises an integrated circuit configured for processing the document.

20   28.   The printed circuit board of claim 27, wherein said processing includes parsing and/or

transforming of the document.

29. The printed circuit board of claim 26, wherein said special purpose processor comprises a supplemental general purpose processor.

30. The printed circuit board of claim 29, further comprising:

5   a memory operably connected to said supplemental general purpose processor; and

computer readable code stored in said memory and executable by said supplemental

general purpose processor for processing the document.